



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,619	03/11/2004	Akihisa Nagami	62807-172	4743

7590 02/24/2009
MCDERMOTT, WILL & EMERY
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

MCADAMS, BRAD

ART UNIT	PAPER NUMBER
----------	--------------

2456

MAIL DATE	DELIVERY MODE
-----------	---------------

02/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,619

Applicant(s)

NAGAMI ET AL.

Examiner

ROBERT B. MCADAMS

Art Unit

2456

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 03/11/2004.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the amendment filed on November 24, 2008.
2. Claim 2 has been cancelled, Claims 1 and 3-15 are pending.

Response to Arguments

3. The appropriate boxes of Form 1449 submitted on March 11, 2008 have been properly initialed.
4. Applicant's arguments with respect to **Claims 1 and 3-15** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1, 5-6, and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Peiffer* (U.S. Patent No. 7,007,092 B2) in view of *Klein* (U.S. Patent No. 6,917,971 B1).

As to Claim 1, *Peiffer* discloses a traffic control apparatus (**Connection Management Device 20, Figure 1, 3-4**) for controlling traffic between a plurality of client apparatuses (**12, Figure 1, 3-4**) and a server apparatus (**Server 14, Figure 1, 3**)

in a service system including the plurality of client apparatuses for issuing service requests to the server apparatus and the server apparatus for receiving the service requests from the client apparatuses to provide the service (**see figures 1, 3, 4; column 3, lines 26-33 and column 5, lines 41-5**), comprising: a unit for receiving the service requests from the client apparatuses to the server apparatus (**Column 3, Lines 27-33**); a unit for receiving a reply sent from the server apparatus in response to the service request (**Column 3, Lines 27-33**) and controlling the number of client apparatuses simultaneously connected to the server apparatus in accordance with reception performance of the client apparatus (**Figures 1,3, 6-8; Column 6, Lines 58-60 and Paragraph bridging Column 7 and 8**); and a unit for relaying requests to the server apparatus with regard to the service requests received from the plurality of client apparatuses in accordance with the number of simultaneously connected client apparatuses (**Figures 1, 3-4, 6-7; Column 4, Lines 23-34 and Column 6, Lines 47-60; Column 7, Lines 19-31**).

However, *Peiffer* does not expressly disclose a unit for measuring reception performance of a client apparatus.

Klien, in the same field of endeavor, teaches a unit for measuring reception performance of a client apparatus (**Figure 3; Column 7, Lines 26-54 and paragraph bridging Columns 7 and 8**).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the traffic control apparatus as taught by *Peiffer* with a client

measuring unit as taught by *Klien*. The motivation would have been to be able to measure client reception to improve overall performance.

As to **Claim 5**, *Klien-Peiffer* further discloses a client performance measurement unit for observing time that the client apparatus receives the service reply to calculate the data reception performance of the client apparatus (**Column 7, Lines 26-54**).

As to **Claim 6**, *Klien-Peiffer* further discloses a client performance measurement unit for observing time that the server apparatus sends the service reply to calculate the data reception performance of the client apparatus (**Column 7, Lines 26-54**).

As to **Claim 11**, *Peifer* discloses a service system including a server apparatus (**Server 14, Figure 5**) for receiving service requests from client (**12, Figure 5**) apparatuses and a traffic control apparatus (**Connection Management Device 20, Figures 3-5**) for controlling traffic between the client apparatuses and the server apparatus, wherein the traffic control apparatus comprises a unit for receiving service requests from the client apparatuses to the server apparatus (**14, Figure 3-5, Column 3, Lines 26-33**); a unit for receiving a reply sent from the server apparatus in response to the service request (**Figures 6-8**) and controlling the number of client apparatuses simultaneously connected to the server apparatus in accordance with reception performance of the client apparatus (**Column 5, Lines 8-15; Column 7, Lines 19-31; Column 8, Lines 1-26**); and a unit for making relay processing to the server apparatus

with regard to the service requests received from the plurality of client apparatuses in accordance with the number of simultaneously connected client apparatuses (**Column 5, Lines 4-15 and Lines 46-51; Column 6, Lines 58-60; Column 7, Lines 19-31**); and the server apparatus comprises: a unit for sending the reply to the service request to the traffic control apparatus (**50, Figure 6-8; Column 8, Lines 1-18**).

However, *Peiffer* does not expressly disclose a unit for measuring reception performance of a client apparatus.

Klien, in the same field of endeavor, teaches a unit for measuring reception performance of a client apparatus (**Figure 3; Column 7, Lines 26-54 and paragraph bridging Columns 7 and 8**).

At the time of invention it would have been obvious to a person of ordinary skill in the art to combine the traffic control apparatus as taught by *Peiffer* with a client measuring unit as taught by *Klien*. The motivation would have been to be able to measure client reception to improve overall performance.

7. **Claims 3, 10, 13-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,007,092 B2 to *Peiffer* in view of *Klein* (U.S. Patent No. 6,917,971 B1) in further view of *Agrawal* (U.S. Patent No. 6,606,661 B1).

As to **Claim 3**, *Peiffer-Klien* discloses a traffic control apparatus according to Claim 1. *Peiffer-Klien* does not expressly disclose a unit for estimating a waiting time and for sending an access restriction message.

Agrawal discloses a unit for estimating a waiting time of the reply supplied by the server apparatus (**MTBR, Column 4, Lines 50-54**); and a unit for sending an access restriction message for rejecting the request when the waiting time is longer than a fixed time (**Column 5, Lines 14-15**).

Peiffer and *Agrawal* are analogous art because they are from the same field of endeavor with respect to traffic control apparatuses.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of *Peiffer* and *Agrawal* to include a unit for restricting access of the client request when the wait time is too great. The motivation would have been to service the largest possible number of clients without running out of resources (**Column 2, Lines 34-42**)

As to **Claim 10**, *Agrawal-Peiffer-Klien* further discloses a unit for providing a maximum processing time of the request to the client apparatus before the request is transferred to the server apparatus (**Tmax, Column 4, Lines 34-38**). In addition, the same motivation is used as the rejection for Claim 3.

As to **Claim 13**, *Agrawal-Peiffer-Klien* further discloses a unit for controlling an average response time to the client apparatus within a fixed time (**G(T), Column 4, Lines 18-30**). In addition, the same motivation is used as the rejection for Claim 3.

As to **Claim 14**, *Agrawal-Peiffer-Klien* further discloses a unit for providing a maximum processing time of the request to the client apparatus before the request is transferred to the server apparatus (**Tmax, Column 4, Lines 34-38**). In addition, the same motivation is used as the rejection for Claim 3.

8. **Claims 4, 7-9, and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Peiffer* (U.S. Patent No. 7,007,092 B2) in view of *Klein* (U.S. Patent No. 6,917,971 B1) and further in view of *Miyamoto* (U.S. Patent No. 6,101,542).

As to **Claim 4**, *Peiffer-Klien* discloses a traffic control apparatus according to Claim 1. *Peiffer-Klien* does not expressly disclose a unit for changing priority of the requests. *Miyamoto* discloses a unit for changing priority used to relay the request to the server apparatus in accordance with the data reception performance of the client apparatus (**Column 10, Lines 61-64**).

Peiffer-Klien and *Miyamoto* are analogous art because they are from the same field of endeavor with respect to traffic control apparatuses.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine the teachings of *Peiffer-Klien* and *Miyamoto* to include a unit for prioritizing client requests. The motivation would have been to match the client performance with the performance of the connection from the server apparatus (**Column 4, Lines 7-11**).

As to **Claim 7**, *Miyamoto-Peiffer-Klien* further discloses a unit for making access restriction on the request already received from the client apparatus when priority of the request received later is higher than that of the already received request (**Column 12, Lines 21-25**). In addition, the same motivation is used as the rejection for Claim 4.

As to **Claim 8**, *Miyamoto-Peiffer-Klien* further discloses a unit for changing priority of the request relayed to the server apparatus in accordance with the data

reception performance of the client apparatus (**Column 10, Lines 61-64**). In addition, the same motivation is used as the rejection for Claim 4.

As to **Claim 9**, *Miyamoto-Peiffer-Klien* further discloses a unit for controlling an average response time to the client apparatus within a fixed time (**Column 3, Paragraph 3-4**). In addition, the same motivation is used as the rejection for Claim 3.

As to **Claim 12**, *Miyamoto-Peiffer-Klien* further discloses a unit for changing priority of the request relayed to the server apparatus in accordance with the data reception performance of the client apparatus (**Column 10, Lines 61-64**). In addition, the same motivation is used as the rejection for Claim 4.

9. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over *Peiffer* (U.S. Patent No. 7,007,092 B2) in view of *Lee* (U.S. PGPub. No. 2003/0046383 A1).

As to **Claim 15**, *Peiffer* discloses a traffic control apparatus (**Connection Management Device 20, Figure 1, 3-4**) for controlling traffic between at least one server apparatus (**Server 14, Figure 1, 3**) for providing service and a plurality of client apparatuses (**12, Figure 1, 3-4**) for issuing a service request to said server apparatus, comprising:

a unit for receiving a service request issued to said server apparatus by one of said client apparatuses (**Column 3, Lines 27-33**);

a unit for transmitting said service request to said server apparatus (**Figures 1, 3-4, 6-7; Column 4, Lines 23-34 and Column 6, Lines 47-60; Column 7, Lines 19-31**);

a unit for receiving from said server apparatus a response to said service request
(Column 3, Lines 27-33);

a unit for transmitting said response to said one client apparatus **(Column 3, Lines 27-33);**

a unit for obtaining a sum of client performance stored in correspondence with said server apparatus **(Total client bandwidth; Paragraph bridging Columns 7 and 8)**

a unit for refusing the acceptance of a new service request from among said plurality of client apparatuses to said server apparatus **(Client connections are closed as monitored performance indicators exceed a predetermined value. Column 7, Lines 19-48 and Paragraph bridging Columns 7 and 8).**

However, *Peiffer* does not expressly disclose a unit for storing a value by dividing the data size by the time.

Lee, in the same field of endeavor, teaches a unit for measuring the time for receiving said response from said server apparatus by said one client apparatus and the data size of said response, and storing a value which is obtained by dividing said data size by said time and indicates a processing performance of said one client apparatus **(“Bytes Sent” is divided by “Transfer Time Taken” to equal “Averaged Bandwidth”. Paragraph 0032);**

At the time of invention, it would have been obvious to a person of ordinary skill in the art to combine the traffic control unit as taught by *Peiffer* with allowing the traffic

control unit to refuse new service requests based on the sum of client performance value as calculated in *Lee*.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT B. MCADAMS whose telephone number is (571)270-3309. The examiner can normally be reached on Monday-Thursday 6:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/797,619
Art Unit: 2456

Page 11

/R. B. M./
Examiner, Art Unit 2456

/Ashok B. Patel/
Primary Examiner, Art Unit 2456